

*A Notice of the Baradla Cavern, near Agtelek, in Hungary.*

By Dr. SCHMIDL\*.

This is the most extensive of the caverns at present known in the Austrian empire. Its principal gallery has a length of more than  $\frac{3}{4}$  of an Austrian mile (about 4 English miles). The limestone-mountains containing this natural excavation bear some resemblance to the Karst Mountain of Illyria, and may be considered to absorb the atmospheric waters, as their interior contains three rivulets, two in the principal and one in a lateral cavern. These subterranean currents come to day near Josafö, N.E. of Agtelek, with sufficient water to work several mills. Most of the larger caverns examined by Dr. Schmidl have before their mouth a heap of rolled fragments, rising from the bottom of the valley. The heap, or talus, is somewhat depressed at its top; it then slopes rather steeply towards the mouth, and continues within the interior of the cave, before the commencement of the real cave-soil, lying somewhat beneath the level of the external valley-bottom. The mouth itself is most frequently situated on a high, steep, sometimes nearly vertical cliff. It is generally a fissure, increasing in breadth downwards, with its lower extremity concealed by the heap of detritus. This fissure has been evidently obstructed by falling rocks, so as to prevent the high-water penetrating to the interior: the rocks, corroded by the action of the waters, broke further down, and produced the heaps of detritus; until, at last, the external waters found another way into the interior of the mountains.

Like the caverns of Carniola, the Baradla Cavern is composed of a series of isolated chambers and narrow channels; but a greater number of separations being broken through, its longitudinal extent has become more considerable. The terminations of the cavern are no more than 180 to 200 fathoms distant from the outside of the mountain, opposite to its mouth.

The inner portions of the Agtelek Cavern are warmer than the exterior, and the dry portions have a higher temperature than those traversed by running water. The thermometer indicated  $8^{\circ}3$  R. in the first large hall, and  $10^{\circ}4$  R. in the last one.

The fauna of the Baradla Cavern is rather rich, especially in insects; among them are genuine cavicolous forms; namely, two species of *Acarina* (*Hæmalastor gracilipes* and *Eschatocephalus gracilipes*, Frauent.). Tritons are not unfrequent. The Frogs found in the cavern are probably but accidental tenants. A genus of *Hirudinidæ* (*Typhlobdella*, Kov.) is peculiar to this cavern. A lateral cave is called the "Bat-cave," on account of the enormous number of these animals found inhabiting it; so much so, indeed, that experiments have been made to use their excrement as a substitute for guano. No *Proteus* has hitherto been found in the Hungarian cavern in question. Dr. Schmidl was the first who discovered, in the soil of one of the lateral branches of the Baradla Cave, the fossil remains of *Ursus spelæus*.

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